Lufthansa Technik AG LUFH070PWO

- 1. An arrangement for connecting a cellular phone located in an aircraft, land vehicle, sea- or spacecraft to a stationary mobile radio network (8) which exhibits the following:
 - at a stationary position:
- a) a device for transmitting/receiving IP data to/from a corresponding device of the vehicle,
 - b) a device (6) for converting the IP data into mobile radio data and conversely,
- 20 c) a device (7) for transmitting/receiving the mobile radio data to/from the stationary mobile radio network;

characterized in that it also exhibits

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- on board the vehicle:
 - d) a device (4) for transmitting/receiving IP data to/from a ground station,

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- e) at least one mobile radio base station,
- f) a device (2) for converting the mobile radio data into the IP protocol and conversely.

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2. The arrangement as claimed in claim 1, characterized in that the mobile radio base station (1) forms a mobile radio pico cell on board the vehicle.

3. The arrangement as claimed in claim 1 or 2, characterized in that the connection between the device b) and the device c) is established via the intranet of the vehicle.

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- 4. The arrangement as claimed in one of claims 1 to 3, characterized in that the device b) has an IP call manager (3).
- 10 5. The arrangement as claimed in one of claims 1 to 4, characterized in that the device c) is constructed for transmitting/receiving via one or more switching stations.
- 15 6. The arrangement as claimed in claim 5, characterized in that the switching stations comprise satellites.
- 7. The arrangement as claimed in one of claims 1 to 20 6, characterized in that the device d) is constructed for transmitting/receiving via one or more switching stations.
- The arrangement as claimed in claim 7,
 characterized in that the switching stations comprise satellites.
- 9. The arrangement as claimed in one of claims 1 to 8, characterized in that the connection between the 30 device d) and the device e) is established via the Internet.
- 10. The arrangement as claimed in one of claims 1 to 9, characterized in that the device e) has an IP call 35 manager (5).
 - 11. The arrangement as claimed in one of claims 1 to 10, characterized in that the device f) transmits/receives the mobile radio data wirelessly or

wire-connected to/from the stationary mobile radio network (8).

- 12. The arrangement as claimed in one of claims 1 to 11, characterized in that it has a number of devices e) and f) which are arranged spatially spaced apart in the area of different stationary mobile radio networks (8).
- 13. A method for connecting a cellular phone located 10 in an aircraft, land vehicle, sea- or spacecraft to a stationary mobile radio network (8), comprising the following steps:
- aa) logging-in of the cellular phone at a local

 mobile radio cell which is formed by a mobile
 radio base station (1) arranged on board the
 vehicle;
- bb) converting the mobile radio data into the IP
 protocol and conversely;
 - cc) transmitting/receiving the IP data to/from a
 ground station;
- ee) converting the IP data into mobile radio data and conversely;
 - ff) transmitting/receiving the mobile radio data to/from the stationary mobile radio network.